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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/777,063

02/13/2004

Youji Notoya

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EXAMINER

ANYIKIRE, CHIKAODILI E

ART UNIT

PAPER NUMBER

2482

NOTIFICATION DATE

DELIVERY MODE

01/03/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/777,063	Applicant(s) NOTOYA ET AL.	
	Examiner CHIKAODILI E. ANYIKIRE	Art Unit 2482	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8, 11, 13, 15 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8, 11, 13, 15, and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application is responsive to application number (10777063) filed on February 13, 2004. Claims 8, 11, 13, 15, and 18-22 are pending and have been examined.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 8, 13, and 15 rejected under 35 U.S.C. 102(e) as being anticipated by Hannuskela (US 2004/0218816).

As per **claim 8**, Hannuksela discloses a moving picture decoding method for decoding, on a picture-by-picture basis, a coded stream comprising: coded picture data for each picture included in the coded stream; display order information for each picture included in the coded stream, where the display order information for each picture is a picture order count (POC) and has a value indicating the display order of the respective pictures; and a flag inserted into the coded stream so as to indicate a position among the coded picture data where the values of the display order information of the pictures in the code stream are sequential or non-sequential, where being sequential is being incremental by one and being non-sequential is a state other than being incremental by one, the flag being stored in the coded stream or in random access point information in a file system to convey the coded stream, the method comprising:

an information extraction step of extracting the flag indicating a position among the coded picture data where the values of the display order information are non-sequential (paragraphs [0067] - [0077]); and

a management step of managing a storage memory area for storing a decoded picture based on the flag (paragraph [0077]), wherein

in the management step, clip information is given to the decoded picture stored in the storage memory area, said clip information being updated when the flag is extracted, and a picture whose position is earliest in a display order among the decoded pictures stored in the storage memory area is determined as a picture to be removed, based on the display order information and the clip information (paragraph [0066]-[0070]).

Regarding **claim 13**, arguments analogous to those presented for claim 8 are applicable for claim 13.

Regarding **claim 15**, arguments analogous to those presented for claim 8 are applicable for claim 15.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (US 6,148,140, hereafter Okada) in view of Hannuksela (US 2004/0218816).

As per **claim 18**, Okada discloses a moving picture coding method for coding an inputted original coded moving picture signal on a picture-by-picture basis and generating a coded stream,

wherein the inputted coded moving picture signal includes coded picture data for each picture, and display order information for each picture, and the display order

information for each picture is a picture order count (POC) has a value indicating the display order of the respective pictures, the method comprising:

a detecting step of detecting whether the values of the display order information for the pictures to be included in the generated coded stream are sequential or non-sequential, where being sequential is being incremental by one and being non-sequential is a state other than being incremented by one; (column 45 lines 19-48);

a flag information generation step of generating a flag information indicating that the values of the display order information are non-sequential when said detecting step detects that the values of display order information values for the pictures to be included in the generated coded stream are non-sequential; (column 26 lines 46-64); and

a coded stream generating step of generating a coded stream comprising: the coded picture data for each picture to be included in the generated coded stream; and the flag inserted into the coded stream so as to indicate a position among the coded picture data where the display order of the pictures is non-sequential (column 24 lines 55-64 and column 45 lines 19-48); and

the flag is stored in the coded stream or the flag is stored in random access point information in a file system to convey the coded stream (column 26 lines 1 – 15; Okada teaches that the flag relating to the seamless linking information is stored in the coded stream and part of the management file system), wherein in coded stream generating step, the flag is inserted between two pictures in the generated coded stream, said two pictures being non-sequential in display order (column 26 lines 56-64).

However, Okada does not explicitly teach the values of the display order information for the pictures to be included in the generated coded stream are sequential or non-sequential, where being sequential is being incremental by one and being non-sequential is a state other than being incremental by one.

In the same field of endeavor, Hannuksela teaches the values of the display order information for the pictures to be included in the generated coded stream are sequential or non-sequential, where being sequential is being incremental by one and being non-sequential is a state other than being incremental by one (paragraphs [0067] – [0077]).

Therefore, it would have been obvious for one having skill in the art at the time of the invention to modify the invention of Okada in view of Hannuksela. The advantage is the detection of scene changes .

As per **claim 19**, Okada discloses the moving picture coding method according to claim 18,

wherein in the coded stream generating step, the coded stream is generated such that a display order of pictures in the predetermined coding unit is sequential, and such that the display order of the pictures in said predetermined coding unit is located earlier than a display order of pictures in a predetermined coding unit immediately following said predetermined coding unit (column 26 lines 56-64).

Regarding **claim 20**, arguments analogous to those presented for claim 18 are applicable for claim 20.

As per **claim 22**, Okada discloses the moving picture coding method according to claim 18, wherein the flag is stored in supplemental enhancement information (SEI) for storing additional information, the SEI being located between clips in the generated coded stream (column 26 lines 1 - 15, Okada discloses the management file information relating to the flag and is used as enhancement information).

6. Claim 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hannuksela (US 2004/0218816) in view of Teo et al (US 5,621,464).

As per **claim 11**, Hannuksela discloses the moving picture decoding method according to claim 8, further comprising an invalid picture storage step of storing an invalid picture in the area when values indicated by display order information of the pictures are in non-sequential (paragraph [0066]-[0077]),

in the management step, whether or not to store an invalid picture in the area is determined based on the flag information and the coding order information (paragraph [0067]-[0077])), and

in the invalid picture storage step, an invalid picture is stored in the area based on a result of the determination made in the management step (paragraph [0077]).

However, Hannuksela does not explicitly teach wherein the flag indicates that the values indicated by the coding order information are in non-sequential order.

In the same field of endeavor, Teo et al discloses wherein the flag information indicates that the values indicated by the coding order information are in non-sequential order (Col 1 Ln 29-40).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the image coder of Boon et al with the method of Teo et al. It is well known knowledge that with motion prediction specifically B-pictures that the picture order becomes non-sequential. The advantage would be that it notifies the image coding system to correct the picture order sequence.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIKAODILI E. ANYIKIRE whose telephone number is (571)270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272 - 7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2482

/Chikaodili E Anyikire/
Examiner, Art Unit 2482